B2

hydrogel further comprises at least 95% pyrogen-free water or saline solution. In all embodiments wherein the hydrogel further comprises saline solution, the hydrogel preferably comprises less than 3 % polyacrylamide by weight, based on the total weight of the hydrogel.

III. On page 8, lines 32-34, please delete the paragraph and replace it with the following replacement paragraph:

B3

The combining of acrylamide and methylene bis-acrylamide is preferably done in a molar ratio between acrylamide and methylene bis-acrylamide which is from 175:1 to 800:1, such as from 225:1 to 600:1, preferably from 250:1 to 550:1, most preferably from 250:1 to 500:1.

IV. On page 12, line 25 through page 13, line 15, please delete the paragraphs and replace them with the following replacement paragraphs:

B4

Many disorders are related to a loss of effective activity of the tissue at a functional interface between two organs. For instance, urinary incontinence is related to insufficient sphincter between the urinary bladder and the urethra. By injecting or implanting an endoprosthesis prepared from the hydrogel according to the present invention into the proximal submucosa of the urethra, thereby narrowing the urethra, the disorder may be significantly controlled. Similarly, reflux oesophagitis is related to insufficient resistance between the oesophagus and stomach. By injecting or implanting an endoprosthesis prepared from the hydrogel according to the present invention along the sphincter between the oesophagus and stomach, the contact between the contents of the stomach and the oesophagus may be reduced. Thus, in suitable embodiments, the hydrogel is used for the preparation of an endoprosthesis to treat urinary

B4 incontinence or reflux oesophagitis. The endoprosthesis may, in general, be used to treat disorders related to insufficient resistance at a functional interface between two organs or between segments of one organ.

The solid-weight content of weight percentage acrylamide, as measured after the washing step, as well as the degree of cross-linking is adapted according to the use of the endoprosthesis prepared from the hydrogel. In preferred embodiments, the endoprosthesis is preferably prepared from a hydrogel comprising 1.6 to 3.25% (wt/wt) polyacrylamide, such as 1.8 to 3.1, 2.0 to 3.0, 2.0 to 2.9, preferably 2.0 to 2.8 (wt/wt) polyacrylamide. Alternatively defined, the degree of cross-linking of the hydrogel for use as an endoprosthesis may preferably be such that the complex viscosity of the hydrogel is from about 2.0 to 15 Pas such as from about 5.5 to 15 Pas, such as from 6 to 12 Pas. Alternatively measured, for facial corrections the degree of cross-linking of the hydrogel is preferably such that the elasticity module is from about 10 to 100 Pa, such as about 35 to 75, particularly 35 to 60 Pa, such as 35 to 50 Pa.

V. On page 14, lines 25-29, please delete the paragraph and replace it with the following replacement paragraph:

B5 The hydrogels used for mammoplasty which comprise less than 3.5% by weight polyacrylamide are preferably injectable. Said injectable endoprostheses according to the present invention preferably have a complex viscosity from about 2 to 90, such as 5 to 80 Pas, preferably from about 6 to 76, such as from about 6 to 60, 6 to 40, 6 to 20, such as 6 to 15 Pas.

VI. On page 17, lines 12-20, please delete the paragraph and replace it with the following replacement paragraph:

B6 A further object of the invention is the use of a hydrogel comprising i) more than 6% polyacrylamide by weight, based on the total weight of the hydrogel, and ii) pyrogen-free water or saline solution for the preparation of an endoprosthesis for treating (reflux) oesophagitis. In a suitable embodiment, the hydrogel comprises more than 7, 8, or 9% polyacrylamide. This method for treating (reflux) oesophagitis comprising implanting or injecting a polyacrylamide hydrogel endoprosthesis wherein the hydrogel comprises more than 6% polyacrylamide by weight, based on the total weight of the hydrogel may be performed by implantation or injection of the endoprosthetic device, typically by injection or implantation of the device into the submucosal layer of the tissue.

VII. On page 27, lines 15-18, please delete the paragraph and replace it with the following replacement paragraph:

B7 The polyacrylamide hydrogel (solid weight content 2.5% and ca. 97.5% pyrogen-free water) is injected under the mucous membrane of the conduit between the oesophagus and stomach, such as to re-inforce the sphincter so as to provide increased density of the conduit. It is carried out during a short procedure involving few complications.

In accordance with 37 C.F.R. §1.121(b), also enclosed, in Appendix A, is a version of the above replacement paragraphs marked up to show all the changes relative to the deleted paragraphs.

IN THE CLAIMS:

Please amend claims 1, 5-11, 15-17, 19-20, 22-26, 28-31, and 33-38. A clean version of the amended claims is set forth below. In accordance with 37 CFR § 1.121(b), also enclosed, in Appendix B, is a marked up version of these claims to show amendments made in them: